CPSD / RWC / HMJ / KCB / vdl **Mailed 11/22/02**

Decision 02-11-068 November 21, 2002

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Application of the City and County of San Francisco, through its San Francisco Municipal Railway, for an order authorizing construction of at-grade crossings for 13 intersections along Segment B of the Third Street Light Rail Project in the City and County of San Francisco.	Application 02-08-022 (Filed August 20, 2002)

O P I N I O N

Summary

The City and County of San Francisco (CCSF) proposes to build a 5.2 mile extension of the San Francisco Municipal Railway (Muni) light rail system (3rd St. Extension) beginning at the Caltrain station at 4th Street and King Street and ending at Bayshore Boulevard between Sunnydale Avenue and the San Francisco county line in Visitation Valley. The segment of the proposed 3rd St. Extension included in this decision will extend from 20th Street in the south to 4th Street at King Street to the north. The 3rd St. Extension will address the deficiencies in the transit system serving the communities in the southeastern part of San Francisco. It is also intended to serve as a key infrastructure improvement to help support the economic and physical revitalization of the Bayview-Hunters Point commercial core along 3rd Street and the planned development in Mission Bay. A map of the 3rd St. Extension vicinity is included as Attachment A.

Discussion

The 3rd St. Extension includes the construction of 58 at-grade crossings, and the reconstruction of an existing grade-separated freeway overpass to include light rail vehicles (LRV). This decision deals with the initial segment of the line, known as "Segment B." Segment B consists of 13 at-grade crossings. The 13 intersections and their proposed California Public Utilities Commission (CPUC) crossing number are included as Attachment B.

The 3rd St. Extension links into Muni's existing J & N lines at 4th and King Streets, from there it proceeds south to a station at Berry Street, then southward across the 4th Street Bridge. The bridge at 4th Street is a working drawbridge, with approximately one or two activations per day. This bridge will be removed, and completely rebuilt to modern seismic standards. The bridge shall be rebuilt to its original shape and character because it is a historical structure.

Prior to the bridge, Muni's operation changes from semi-exclusive to street running. To improve overall traffic flow and Muni's operation on the bridge, a "queue-jump" at the signalized intersections will be added at either side of the bridge. This will allow the LRV entering the bridge to get a green signal and proceed prior to vehicular traffic running parallel to the LRV. A step-by-step table describing the sequential operations for raising and lowering the bridge is shown as Attachment C.

South of the 4th Street Bridge, the light rail alignment turns to the east at the new Owens Street. Then at Owens and 3rd Streets it resumes southward along 3rd Street, again in a semi-exclusive alignment. The intersections of 3rd Street at Owens and 4th Street and Owens are fairly complex geometries, and received great scrutiny by California Public Utilities Commission's Rail Crossings Engineering Staff (RCES). These reviews resulted in changes in signage and pavement

markings to increase driver awareness as to the proximity of LRVs, and vehicular stopping areas.

For the duration of Segment B, the alignment is semi-exclusive proceeding down the middle of 3rd Street, serving three additional stations. The only deviation from this is a pair of turnouts onto the east sides of 19th and 20th Streets. These turnouts will initially be storage areas for dead LRVs in the event of mechanical failure (similar to areas of the N Judah line), but will eventually be constructed into a turnaround via Illinois Street when, and if, Mission Bay warrants additional exclusive service. An existing heavy rail crossing of 3rd Street just north of 16th Street will be removed, pending construction of a new rail bridge being built over Islais Creek. RCES is currently working with the Port of San Francisco on this project.

Other safety features throughout the entire extension include making every street crossing fully signalized and using "count down" pedestrian signals. Warning for pedestrians and motorists shall be through traffic signals and signs. In addition to traffic signals, all crossings / intersections with left-turn pockets shall be equipped with active "Train Coming" signs. The "Train Coming" signs shall be interconnected to track detection which will activate the sign whenever an LRV enters the crossing. At 4th Street and Owens Street, a "Stop Here On Red" sign with flashing yellow lights shall be installed for westbound vehicles. A similar sign and flashing lights shall be installed for eastbound vehicles at the 3rd Street and Owens Street crossing.

On July 17, 2002, the Commission granted CCSF a waiver from General Order 143-B 9.06c(1) through Resolution ST-56. This general order requires a 30-inch minimum clearance where persons are permitted to be while trains are in motion. This was necessary due to the finite width of 3rd Street. For the 3rd St.

Extension the sidewalks have been narrowed to a width of nine feet, and parking has been eliminated for much of the route. This waiver impacts a scenario wherein a pedestrian is in the middle of the right-of-way (between the tracks) when LRVs arrive simultaneously from either direction. Mitigation for this consists of increasing the amount of "walk" time to allow a person traveling 2.5 feet / second to safely cross the street (4.0 feet / second is standard). The increased pedestrian travel time, in conjunction with the "count down" pedestrian heads, should discourage persons from attempting to cross the street late in the walk cycle, and then being stranded in the right-of-way. Additionally, Rule 4.22.2 contained in the "San Francisco Municipal Railway Rules and Instruction Handbook" which states "Operators must be prepared to stop short of any person, object, or obstruction within range of their vision" shall be maintained and enforced.

The CCSF, through the Department of City Planning, is the lead agency for this project under the California Environmental Quality Act of 1970 (CEQA), as amended, Public Resources Code Section 21000 et seq. The CCSF's Public Transportation Commission approved the 3rd St. Extension on June 23, 1998. A copy of the document was available for public display at 1145 Market Street in San Francisco. On June 4, 2001, in compliance with CEQA, CCSF filed its Notice of Determination with the State of California Office of Planning and Research and the San Francisco County Clerk, approving this project, which stated that the project will have a significant effect on the environment (State Clearinghouse Number 96102097). Accordingly, CCSF adopted mitigation measures as a condition of approval of the project, and submitted a Statement of Overriding Considerations (SOC) for the project. (Resolution #99-009.) The Notice of Determination is included as Attachment D.

The Commission is a responsible agency for this project under CEQA (Public Resources Code Section 21000 et seq.). CEQA requires that the Commission consider the environmental consequences of a project that is subject to its discretionary approval. In particular, to comply with CEQA, a responsible agency must consider the lead agency's Environmental Impact Report or Negative Declaration prior to acting upon or approving the project (CEQA Guideline Section 15050(b)). The specific activities that must be conducted by a responsible agency are contained in CEQA Guideline Section 15096.

RCES has reviewed CCSF's environmental documentation. The environmental documentation consists of a Final Environmental Impact Report (FEIR), the Notice of Determination, and an SOC. We find that these environmental documents are adequate for our decision making purposes. Analysis of potential environmental impacts included: land use, visual and aesthetics resources, hydrology and water quality, transportation and traffic, geology and seismicity, cultural resources, community facilities and services, socio-economic characteristics, utilities and energy, noise and vibration, biological and wetlands resources, hazardous materials and air quality. We find these documents to be adequate for our decision-making purposes.

Safety and security, transportation and noise are within the scope of the Commission's permitting process. The environmental documentation discussed police, fire and emergency services in the community facilities and services section, but did not identify any potential impacts in Segment B related to safety and security.

Noise impacts were identified in the FEIR related to short-term noise due to construction. The mitigation measures include the use of equipment with effective mufflers, utilize construction techniques that create the lowest noise

levels, minimize off-hour (8pm-7am) and holiday construction activities, create a community liaison program for the local residents and select haul routes that minimize intrusion to residential areas. Mitigation measures due to vibration impacts include the use of pre-drilled piles for pile-driving when within 250 feet of residential areas, modification to the suspension of Breda LRVs to reduce vibrations, relocation of track crossovers from vibration sensitive areas and installation of floating slab trackbed in vibration sensitive areas. Prior to construction, contractor will establish vibration levels at random locations, including those previously established as sensitive, to determine locations for mitigation.

Transportation and traffic impacts were identified in the FEIR related to the reduced Levels of Service (LOS) and increased roadway traffic volumes at four intersections. Two of the impacted intersections are within Segment B.

For the two intersections, the significant and unavoidable impacts could not be mitigated. These are the intersections of 3rd Street and King Street and 4th Street and King Street, which are forecasted to operate at an unacceptable LOS under either the build or the no-build scenario; therefore, CCSF plans no mitigation at these locations. Therefore, for the two unmitigated intersections, a CEQA SOC was adopted.

In adopting the SOC, CCSF determined that certain project benefits outweighed the significant and unavoidable impacts and warrant project approval. In particular, the SOC stated the impacts are due to cumulative conditions in the corridor caused by the impacts of several projects occurring simultaneously. The CCSF found that specific policy considerations, including but not limited to, the environmental, social and economic benefits of the project outweigh the significant unavoidable impacts.

RCES inspected the site of the proposed 3rd St. Extension. After reviewing the need for and safety of the proposed crossing, RCES recommends that the requested authority sought by CCSF be granted for a period of four years.

With respect to the potentially significant noise and transportation impacts identified above that could be mitigated, the Commission finds that CCSF adopted feasible mitigation measures to either eliminate or substantially lessen those impacts. With respect to the project environmental impacts that remain significant and unavoidable, we also find that CCSF identified reasonable project benefits to justify its adoption of an SOC and project approval. Therefore, we similarly adopt and require the mitigations identified in the CCSF's FEIR, and adopt the SOC, for purposes of our project approval.

Application 02-08-022 meets the filing requirements of the Commission's Rules of Practice and Procedure, including Rule 40, which relates to the construction of a railroad or street railroad across a public road, highway or street.

In Resolution ALJ 176-3094, dated August 5, 2002 and published on the Commission Daily Calendar on August 6, 2002, the Commission preliminarily categorized the application as ratesetting, and preliminarily determined that hearings were not necessary. Since no protests were filed and no hearings were held, this preliminary determination remains accurate. Given these developments, a public hearing is not necessary, and it is not necessary to disturb the preliminary determinations made in Resolution ALJ 176-3094.

This is an uncontested matter in which the decision grants the relief requested. Accordingly, pursuant to Public Utilities Code Section 311(g)(2), the otherwise applicable 30-day period public review and comment is being waived.

Assignment of Proceeding

Richard Clark is the assigned Examiner in this proceeding.

Findings of Fact

1. Notice of the application was published in the Commission's Daily Calendar on August 23, 2002. No protests have been filed.

2. The CCSF requests authority, under Public Utilities Code Sections 1201-1205, to construct, maintain and operate 13 at-grade crossings of Segment B of the 3rd Street light rail extension.

3. Public convenience, safety and necessity require the construction of the proposed 3rd Street light rail extension.

4. CCSF is the lead agency under CEQA.

5. The Commission is a responsible agency for this project and has reviewed and considered the CCSF's environmental documentation upon which CCSF relied in adopting mitigation measures for the project.

6. On June 4, 2001, CCSF filed its Notice of Determination approving the extension and found the 3rd St. Extension would have a significant effect on the environment. An SOC was adopted for this extension.

7. CCSF's environmental documents are adequate for our decision-making purposes.

8. Safety and security, transportation and noise are within the scope of the Commission's permitting process.

9. The Commission finds that for each potentially significant impact related to safety and security, transportation or noise, CCSF adopted feasible mitigation measures to either eliminate or substantially lessen those impacts.

10. The Commission finds that for the environmental impacts determined to be significant and unavoidable, CCSF reasonably concluded there are sufficient project benefits to warrant project approval.

Conclusions of Law

1. The application is uncontested and a public hearing is not necessary.

2. We adopt and require the mitigations identified in CCSF's FEIR as well as the SOC for purposes of our project approval.

3. The application should be granted as set forth in the following order.

O R D E R

IT IS ORDERED that:

1. The City and County of San Francisco (CCSF) is authorized to build, maintain and operate 13 highway-light rail at-grade crossings along 4th Street over King (125 J-5.09), Berry (125 J-5.03) and Owens Streets (125 J-4.90), and along 3rd Street over Owens (125 J-4.81), Mission Rock (125 J-4.70), North Common (125 J-4.57), South Common (125 J-4.54), South (125 J-4.41), 16th (125 J-4.28), Mariposa (125 J-4.10), 18th (125 J-4.01), 19th (125 J-3.92) and 20th (125 J-3.83) Streets.

2. Warning for pedestrians and motorists shall be through traffic signals and signs. The movement of light rail vehicles (LRV) at signalized intersections shall be controlled by signals for exclusive LRV use only. All crossing intersections shall be signalized for traffic in all directions and have two aspect LRV track signals. The LRV signals shall have a red "T" above a white "T" and shall be placed on both the near side and far side at each intersection located between the tracks, such that visibility of the LRV signals by motorists shall be minimized. In addition to traffic signals, all crossings / intersections with left-turn pockets shall be equipped with active "Train Coming" signs. The "Train Coming" signs shall be interconnected to track detection as to activate whenever an LRV enters the crossing. At 4th Street and Owens Street, a "Stop Here On Red" sign with flashing yellow lights shall be installed for westbound vehicles. A similar sign and

flashing lights shall be installed for eastbound vehicles at the 3rd Street and Owens Street crossing.

3. Clearances shall be in accordance with General Orders (GO) 26-D and 143-B, with the exception of GO 143-B 9.06 c (1), which has been waived through Commission Resolution ST-56.

4. Walkways shall conform to GO 118. Walkways adjacent to any trackage subject to rail operations shall be maintained free of obstructions and shall be promptly restored to their original condition in the event of damage during construction.

5. Prior to construction, the CCSF shall file with Consumer Protection and Safety Division's Rail Crossings Engineering Section (RCES) final construction plans.

6. Within 30 days after completion of the work granted under this order, CCSF shall notify the Commission's RCES by submitting a standard Commission Form G (Report of Changes at Highway Grade Crossings and Separations), that the work was completed.

7. This authorization shall expire if not exercised within four years unless time is extended or if the above conditions are not complied with. Authorization may be revoked or modified if public convenience, necessity, or safety so require.

8. This application is granted as set forth.

9. Application 02-08-022 is closed.

This order is effective today.

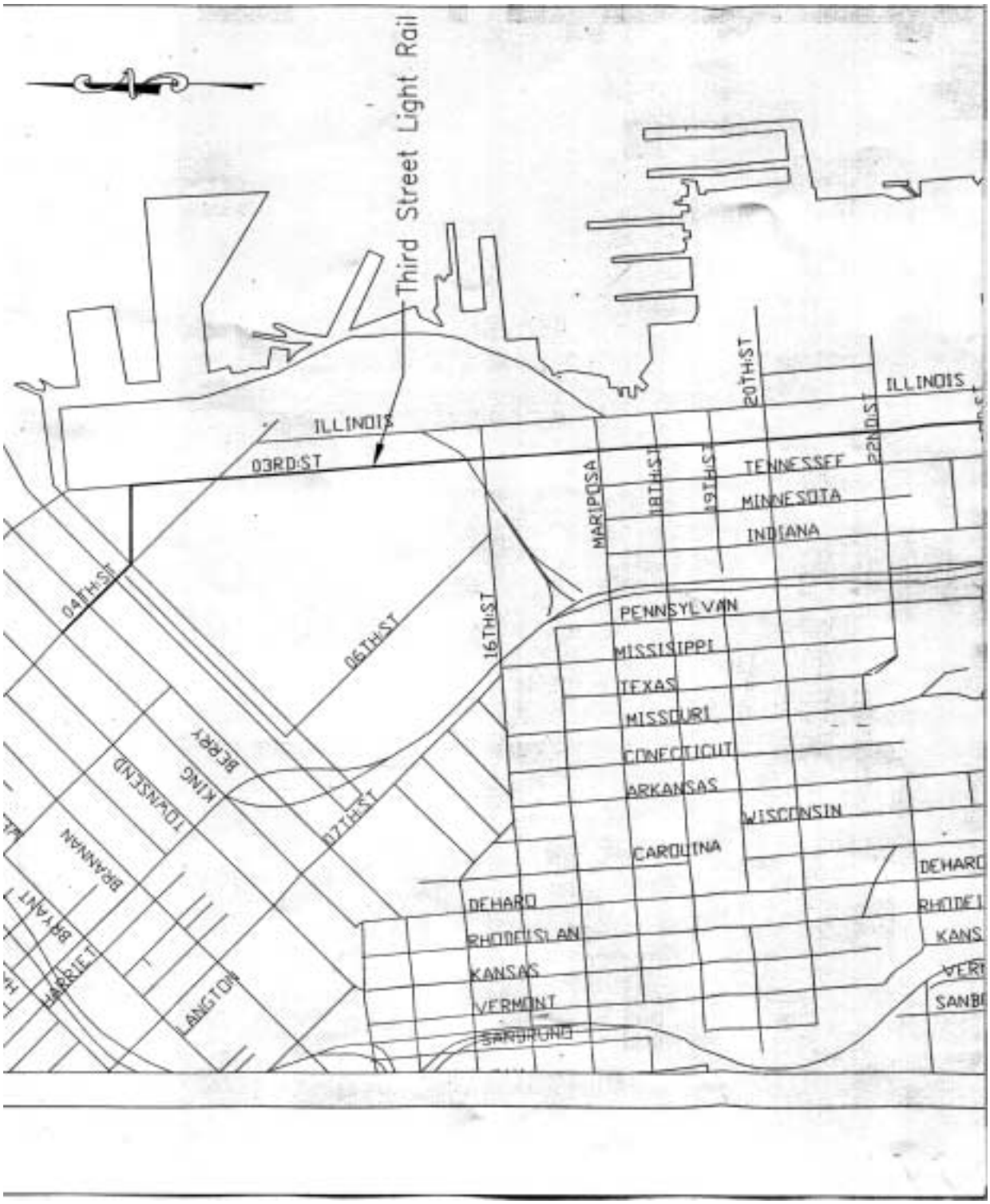
Dated November 21, 2002, at San Francisco, California.

LORETTA M. LYNCH
President
HENRY M. DUQUE

CARL W. WOOD
MICHAEL R. PEEVEY
Commissioners

Commissioner Geoffrey F. Brown, being necessarily absent, did not participate.

ATTACHMENT A



ATTACHMENT B

List of Segment B Crossings

4th Street at King Street	125J-5.09
4th Street at Berry Street	125J-5.03
4th Street at Owens Street	125J-4.90
3rd Street at Owens Street	125J-4.81
3rd Street at Mission Rock Street	125J-4.70
3rd Street at North Common Street	125J-4.57
3rd Street at South Common Street	125J-4.54
3rd Street at South Street	125J-4.41
3rd Street at 16th Street	125J-4.28
3rd Street at Mariposa Street	125J-4.10
3rd Street at 18th Street	125J-4.01
3rd Street at 19th Street	125J-3.92
3rd Street at 20th Street	125J-3.83

ATTACHMENT C

4th Street Bridge and OCS/LRV Operation

Opening Sequence

The following sequence is used to open the bridge for water traffic and close the bridge to roadway and rail traffic

Steps	Bridge Operator Action	Panel Switches/Indicators	Equipment Response	Indicator	Interlocks	Muni
1	Activates Bridge Operating System panel	Uses key to turn on Control Circuit Master Switch.	Energizes electrical eqipment and control circuits.Maintenance walkways retracted.	Panel lights always illuminated	Movement of maintenace walkway is locked out if pit door is open	
2	Initiates Warning signal	Turns traffic siren switch to "on"	Siren and bells Sound, gates light	None		
3	InitiatesTraffic and LRV signals and warning signals, after visually checking that no LRVs are approaching bridge.	Turns traffic signal switch to "stop"	Traffic signals at bridge go red and LRV "T" signals go red. Traffic siren goes for 30 sec. Bells ring continuously	Panel lights illuminated confirming LRV signals "red"	LRV "T" signals must be red before next step is permitted.	LRV "T" at platform at 4th and Berry and at 4th and Owens in LRV Right-of-Way
4	Lowers traffic gates for traffic coming on the bridge	Turns SE/NW Gate on-coming to "lower"	Gates lower, limit switches engage when fully lowered	Gates Lowered Red light goes on	Limit switches must be engaged before next step is permitted	
5	Confirms bridge deck is clear of traffic, pedestrains and LRVs, then lowers gates for traffic leaving bridge	Turns SW/NW Gate off-going to "lower".	Gates lower, limit switches engage when fully lowered. OCS lights "Green" when open	Gates lowered Red light goes on	Limit switches must be engaged before next step is permitted.Allows OCS de-energization at this step.	OCS contactor opens de-energizing OCS when gates are lowered.
6	Retracts end locks and seismic pins	Turns End lock switch to withdraw and Seismic switch to withdraw	End locks and seismic pins retract	End locks withdrawn and seismic green lights go on	Limit switches must confirm locks and poins are retracted before next step is permitted	
7	Releases Parking Brakes	Holds Footpedal "Deadman Switch in "Closed" Position	Allows activation of Joy stick to raise bridge	Not seated light on as bridge moves	Deadman switch must be held in "Closed" position during movement of the bridge	
8	Releases joy stick and deadman	Returns Joystick to "neutral" and releases Deadman switch	Motors de-energized and Parking Brakes set. Bridge is fully opened.	None		

ATTACHMENT C

4th Street Bridge and OCS/LRV Operation

After watercraft has cleared, the following sequence is used to close the bridge and open it to roadway and rail traffic.

Closing Sequence

Steps	Bridge Operator Action	Panel Switches/Indicators	Equipment Response		Interlocks	OCS/LRV Action
1	Releases Parking Brakes	Holds "Deadman Switch in "Closed" Position	Allows activation of Joy stick to lower bridge	Not seated light on as bridge moves	Deadman must be held in "Closed" position during movement of the bridge	
2	Releases joy stick and deadman	Returns Joystick to "neutral" and releases Deadman switch	Span lowered, Motors de-energized and Parking Brakes set	Fully seated light goes red		
3	Engages end locks	Turns end lock switch to "drive"	End locks engage and rail detectors activate	End locks driven green lights go on	Limit switches confirm locks are driven and secured, rail detectors sense proper closure	Rail detectors must confirm proper alignment.
4	Engages seismeic pins	Turns seismic switch to "drive"	Seismic pins engage	Seismic pin driven green lights go on		
5	Raises traffic gates	Turns traffic gate switches to "Raise"	Sequentially raises gates, limit switches engage when fully raised. OCS engergized.	OCS Contactor light goes red	Limit switches prevent operation of next step until gates are raised. LRV T-signals linked to OCS detector.	OCS contactor closes re-energizing OCS when gates are raised. If the OCS indicator light remains green (de-energized)- LRV signal "T" signal remains red.
6	Activates Traffic and LRV signals	Turns traffic switch to "Go"	Warning bells stop and traffic signals change to green.	Gates lowered light go off		LRV proceeds from platform at 4th and Berry and proceeds from 4th and Owens Right-of-Way. LRVs get advanced "T" signal before traffic.
7	De-Activates Bridge Operating System panel	Uses key to turn off Control Circuit Master Switch	De-Energizes electrical eqipment and control circuits.			

ATTACHMENT D

OFFICE OF ENVIRONMENTAL REVIEW
$25.00 Private Development Fee IS OWED X

ENDORSED
FILED
San Francisco County Clerk

JUN 04 2001

BY: J. Mueller
Deputy County Clerk

NOTICE OF DETERMINATION

X State of California
Office of Planning and Research
P.O. Box 3044
Sacramento, CA 95812-3044
State Clearinghouse No.: 96102097

X County Clerk
City and County of San Francisco
City Hall - Room 168
1 Dr. Carlton B. Goodlett Place
San Francisco, CA 94102

Pursuant to the California Environmental Quality Act (CEQA), the Guidelines of the Secretary for Resources and San Francisco requirements, this Notice of Determination is transmitted to you for filing. At the end of the posting period, please return this Notice to the Contact Person with a notation of the period it was posted.

File Number and Project Title: 96.281E - Third Street Light Rail Project
Address: Generally along Third Street from County line to Market Street, within southeastern portion of San Francisco; and a 13 acre portion of former Western Pacific rail yard east of Third Street, north of Pier 80.

Project Description: Construction of a new light rail transit system along Third Street, generally from the County line at the southern end to Market Street at the northern end; Construction of new light rail maintenance and storage facility.

Lead Agency: City and County of San Francisco by Department of City Planning,
1660 Mission Street, San Francisco, CA 94103-2414
Contact Person: Paul Maltzer **Telephone:** (415) 558-5977
Project Applicant: San Francisco Municipal Railway

The City and County of San Francisco Public Transportation Commission decided to carry out or approve the project on June 23, 1998. A copy of the documents may be examined at 1145 Market Street, Suite 402, San Francisco, CA.

1. An environmental document has been prepared pursuant to the provisions of CEQA, as noted below. It is available to the public and may be examined at the Office of Environmental Review at the above address.
   _Certificate of Exemption
   _Negative Declaration
   X Environmental Impact Report

2. A determination has been made that the project in its approved form
   _will not have a significant effect on the environment.
   X will have a significant effect on the environment and findings were made pursuant to Section 15091 and a statement of overriding considerations was adopted

3. Mitigation Measures X were _were not made a condition of approval.

Gerald G. Green
Director of Planning

by Paul E. Maltzer
Environmental Review Officer

cc: Sue C. Hestor, 870 Market St, #1128, San Francisco CA 94102
Project Sponsor